

In the Claims:

Claims 1-22 (Cancelled)

Please enter the following new claims:

23. (New) A vaginal indwelling thermometer for use in the vagina of a subject mammal, the thermometer comprising:
a housing enclosing:
temperature sensing means which generate data indicative of the *per vaginam* temperature of the subject mammal; and
a temperature recording means integral with the temperature sensing means, wherein the temperature recording means records temperature data generated by the temperature sensing means, wherein the vaginal indwelling thermometer is configured to be left in a vagina of a subject mammal for a long period of time without causing discomfort to said subject and without being easily lost.
24. (New) An indwelling thermometer according to claim 23, wherein the temperature sensing means is an electronic, chemical or mechanical temperature sensing means.
25. (New) An indwelling thermometer according to claim 23, wherein the temperature sensing means comprises a thermocouple linkage or a thermistor.
26. (New) An indwelling thermometer according to claim 23, wherein the housing comprises a biocompatible material.
27. (New) An indwelling thermometer according to claim 26, wherein the housing is formed from a material selected from the group consisting of acrylonitrile-butadiene-styrene terpolymer, copolyester elastomer, ethylene acrylic acid,

ethylene methylacrylate, ethylene-vinyl-acetate, high-density polyethylene, high-impact polystyrene, liquid crystal polymer, low-density polyethylene, linear low-density polyethylene, poly(butylene terephthalate), polycarbonate, polycarbonate, alloy/blend, polycarbonate-PET alloy/blend, polyethylene, polyetherimide, poly(ethylene terephthalate), polypropylene, poly(phenylene oxide), polyurethane, polyvinyl chloride, styrene acrylonitrile, styrene block copolymer, syndiotactic polystyrene, thermoplastic elastomer, thermoplastic olefin, thermoplastic urethane, ultra low-density polyethylene, very low-density polyethylene, Silicone, Biodegradable Copolymers Copolymer Coatings, Pseudo - Poly(Amino-Acids), Ceramic Composites, Thermoplastic-Fiber Composites, pyrolytic carbon and Pyrolite.

28. (New) An indwelling thermometer according to claim 23, wherein the temperature sensing means is configured to record data every 20 minutes.
29. (New) An indwelling thermometer according to claim 23, wherein said subject mammal is human.
30. (New) An indwelling thermometer according to claim 23, wherein the thermometer is configured to be worn *per vaginam* for at least one entire menstrual cycle.
31. (New) An indwelling thermometer according to claim 26, wherein the thermometer is configured to be used to determine ovulation in the subject mammal.
32. (New) A method of determining ovulation in a subject mammal, the method comprising:
 - providing in a vagina of a subject mammal a vaginal indwelling thermometer in said subject mammal, wherein the thermometer comprises

temperature sensing means which generates data indicative of the *per vaginam* temperature of the subject mammal, and temperature recording means integral with the temperature sensing means;

removing said thermometer from said vagina of said subject mammal, and

reading the temperature data recorded by said recording means to determine an ovulation-associated temperature spike from said recorded data.

33. (New) A method according to claim 32, wherein said thermometer is maintained in said vagina for at least one week.

34. (New) A method of determining infection in a subject mammal, the method comprising;

providing in an ear or vagina of a subject mammal an in-ear or vaginal indwelling thermometer, wherein the thermometer comprises temperature sensing means which generate data indicative of the core body temperature of the subject mammal, and temperature recording means integral with the temperature sensing means and which record temperature data generated by the temperature sensing means;

removing said thermometer from said subject mammal; and

reading the temperature data recorded by said recording means to determine an increase in temperature attributable to infection from said recorded data.

35. (New) A method according to claim 34, wherein wherein said thermometer is maintained in said vagina or ear for at least one week.

36. (New) A device for the prediction of ovulation in a subject mammal, the device comprising :

a housing configured to be left in a vagina of said subject mammal for a long period of time without causing discomfort to said subject and without being easily lost;

a temperature sensing means located within said housing for generating data indicative of the *per vaginem* temperature of the subject mammal;

a temperature recording means located within the housing which records the temperature data generated by the temperature sensing means;

a removal means associated with said housing; and

a means for connecting said device, once removed from said vagina of said subject mammal, to means for reading and interpreting said recorded data

wherein said device is configured to be worn *per vaginem* for at least one complete menstrual cycle.

36. (New) A device according to claim 36, wherein said temperature sensing means is an electronic, chemical or mechanical temperature sensing means.
37. (New) A device according to claim 36, wherein said temperature sensing means comprises a thermocouple linkage or a thermistor.
38. (New) A device according to claim 36, wherein said subject mammal is human.
39. (New) A device according to claim 36, wherein said housing comprises a biocompatible material.
40. (New) A device according to claim 39, wherein said housing is formed from a material selected from the group consisting of acrylonitrile-butadiene-styrene terpolymer, copolyester elastomer, ethylene acrylic acid, ethylene methylacrylate, ethylene-vinyl-acetate, high-density polyethylene, high-impact polystyrene, liquid crystal polymer, low-density polyethylene, linear low-density polyethylene, poly(butylene terephthalate), polycarbonate, polycarbonate, alloy/blend, polycarbonate-PET alloy/blend, polyethylene, polyetherimide, poly(ethylene terephthalate), polypropylene, poly(phenylene oxide), polyurethane, polyvinyl chloride, styrene acrylonitrile, styrene block copolymer, syndiotactic polystyrene,

thermoplastic elastomer, thermoplastic olefin, thermoplastic urethane, ultra low-density polyethylene, very low-density polyethylene, Silicone, Biodegradable Copolymers Copolymer Coatings, Pseudo - Poly(Amino-Acids), Ceramic Composites, Thermoplastic-Fiber Composites, pyrolytic carbon and Pyrolite.

41. (New) A device according to claim 36, wherein said temperature sensing means is configured to record data every 20 minutes.
42. (New) A method of determining ovulation in a subject mammal, the method comprising:
 - providing in a vagina of a subject mammal a vaginal indwelling device in said subject mammal, wherein the device comprises a temperature sensing means which is configured to generate data indicative of the *per vaginam* temperature of the subject mammal, and a temperature recording means integral with the temperature sensing means;
 - removing said device from said vagina of said subject mammal; and
 - reading the temperature data recorded by said recording means to determine a pre-ovulation temperature spike from said recorded data.
43. (New) A method according to claim 42, wherein said thermometer is maintained in said vagina for at least one week.
44. (New) A device for the detection of infection in a subject mammal, the device comprising :
 - a housing configured to be left in an ear or a vagina of said subject mammal for a long period of time without causing discomfort to said subject and without being easily lost;
 - a temperature sensing means located within said housing for generating data indicative of the core body temperature of the subject mammal;

a temperature recording means located within the housing which record the temperature data generated by the temperature sensing means;

a removal means associated with said housing; and

a means for connecting said device, once removed from said ear or vagina of said subject mammal, to means for reading and interpreting said recorded data.

45. (New) A device according to claim 44, wherein said temperature sensing means is an electronic, chemical or mechanical temperature sensing means.
46. (New) A device according to claim 44, wherein said temperature sensing means comprises a thermocouple linkage or a thermistor.
47. (New) A device according to claim 44, wherein said subject mammal is human.
48. (New) A device according to claim 44, wherein said housing comprises a biocompatible material.
49. (New) A device according to claim 48, wherein said housing is formed from a material selected from the group consisting of acrylonitrile-butadiene-styrene terpolymer, copolyester elastomer, ethylene acrylic acid, ethylene methylacrylate, ethylene-vinyl-acetate, high-density polyethylene, high-impact polystyrene, liquid crystal polymer, low-density polyethylene, linear low-density polyethylene, poly(butylene terephthalate), polycarbonate, polycarbonate alloy/blend, polycarbonate-PET alloy/blend, polyethylene, polyetherimide, poly(ethylene terephthalate), polypropylene, poly(phenylene oxide), polyurethane, polyvinyl chloride, styrene acrylonitrile, styrene block copolymer, syndiotactic polystyrene, thermoplastic elastomer, thermoplastic olefin, thermoplastic urethane, ultra low-density polyethylene, very low-density polyethylene, Silicone, Biodegradable

Copolymers Copolymer Coatings, Pseudo - Poly(Amino-Acids), Ceramic Composites, Thermoplastic-Fiber Composites, pyrolytic carbon and Pyrolite.

50. (New) A device according to claim 44, wherein said temperature sensing means is configured to record data every 20 minutes.
51. (New) A method of determining infection in a subject mammal, the method comprising:
- providing in an ear or vagina of a subject mammal an in-ear or a vaginal indwelling device in said subject mammal, wherein the device comprises temperature sensing means which generates data indicative of the core body temperature of the subject mammal, and temperature recording means integral with the temperature sensing means and which record temperature data generated by the temperature sensing means;
 - removing said device from said ear or said vagina of said subject mammal; and
 - reading the temperature data recorded by said recording means to determine an increase in temperature attributable to infection from said recorded data.
52. (New) A method according to claim 51, wherein said thermometer is maintained in said ear or vagina for at least one week.